

Interdisciplinary experience in carrying out End-of-Degree Projects and End of Master's Degree at the University



Experiencia interdisciplinar en la realización de Trabajos Fin de Grado (TFG) y Fin de Máster en la Universidad

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Abstract

This work presents an innovative project carried out with students from various university academic disciplines. It has been implemented during the 2017-2018 academic year. Developed within the framework of the End of Degree and End of Master Projects (hereinafter TFG / TFM). The common objective of the project has been to mix students from different academic disciplines by completing the TFG / TFM in an interdisciplinary way on the same theoretical / practical problem. The principles that motivated it, theoretical background, essential methodological aspects of its development and conclusions of interest are described.

Keywords: Interdisciplinarity, Bachelor Thesis, Master Thesis, Educational innovation

Resumen

Este trabajo presenta una experiencia didáctica innovadora realizada a lo largo del curso 2017-2018, con alumnos de diferentes titulaciones universitarias, en el marco de los Proyectos Fin de Grado y Fin de Máster (en adelante TFG / TFM). El objetivo común del proyecto ha sido mezclar estudiantes de diferentes disciplinas académicas para realizar el TFG / TFM de forma interdisciplinar, en torno a un mismo problema teórico / práctico. En consecuencia, se describen los principios que la motivaron, antecedentes teóricos, aspectos metodológicos esenciales de su desarrollo y conclusiones de interés.

Palabras clave: Interdisciplinariedad, Trabajo Fin de Grado, Trabajo Fin de Master, innovación educativa.

Author's translation.

Introduction

Debates on improving educational quality are highly relevant in political-educational agendas, both national and international (Pericacho, Vaíllo, Zamorano and Camuñas, 2019; Pucciarelli and Kaplan, 2016). The scientific literature indicates that, despite the fact that teacher construction is a long, complex and multidimensional process, it harbors a particularly critical moment in initial training (Muñoz, et al., 2019). From different supranational organizations, taking into account the importance given to training in competencies, the value of interdisciplinarity in university studies is underlined. Undoubtedly, training in competencies entails the integration of disciplines, knowledge and skills (García et al., 2011). In the specific case of the TFG / TFM, few interdisciplinary experiences are revealed, being a field little explored but that shows many didactic possibilities (Martín et al., 2018; Camacho et al. 2015; Amigo, et al. 2016; Tamayo, et al. 2019).

The undergraduate study plans of the European Higher Education Area (EHEA) conclude with the presentation and defense of a Final Degree Project (TFG). TFM in the case of Master studies. These works must be carried out in the final phase of the study plan and be aimed at assessing the competencies associated with the degree. The realization of these works is usually individual and each student has the guidance of a tutor who guides and tutored

The TFG must allow students to show in an integrated way the training content received and the skills acquired associated with the Bachelor's / Master's degree and may contemplate attending seminars and other face-to-face activities that are considered of interest. The TFG / TFM is a requirement to obtain the final Bachelor's or Master's degree.

The general objective of the project has been to carry out the TFG / TFM in an interdisciplinary way on the same theoretical / practical problem with students from different academic disciplines. The problem and central theme of the Project has been the improvement of education, specifically to design and study the implementation of a Guide to good educational practices for primary and secondary schools.

The project has been developed throughout the 2017-2018 academic year and has had the participation of four Faculties of the Antonio de Nebrija University, being led by a professor from the Department of Education. From each participating Faculty there was an area coordinator, responsible for the selection of the students of his Faculty and for the proper development of the project.

Developing

For the selection of participants, a non-probabilistic type of sampling was used, specifically intentional sampling. In this way, through the area / degree coordinators, 18 TFM / TFG students with excellent grades and attitude were selected, distributed by degree and faculties. Below is the list of students, academic area and project title: Education (4), Translation (1), Modern languages (1), Architecture (1), Interior design (1), Law (2), ADE / Marketing (4), Public relations and audiovisual communication (4).

The interdisciplinary project has consisted of three phases: theoretical approach, execution of the TFG / TFM and public presentation of the conclusions of the work. As a starting point, the Department of Education proposed to the students a theoretical model of a learning ecosystem. Each selected student had a tutor, the coordinator of each faculty included in the project and the usual training for the completion of their TFG / TFM established in the Faculty and degree. In addition, being inserted in this project, he received initial training from the Department of Education on the general subject of the project. The training provided re-

sources and essential bibliography on educational innovation. This was intended for each student included in the project to start from a common theoretical base.

The Schedule followed by implementation and development throughout the 2017-18 academic year was scheduled and established after various meetings of the Project Coordinator with the Area Coordinators. In order to a guided, homogeneous progression, consistent with the synergistic interdisciplinarity that is pursued, a series of deliveries of the students' work were established. These drafts were previously reviewed by each student's tutor and allowed the creation of a repository on the virtual campus that made it easier for both students and tutors to see how their classmates were progressing and what they could incorporate into their work from others.

Likewise, the dynamics of the project generated a multiple review of the works. Thus, the review was carried out by their tutor, the Project Coordinator and the rest of the tutors and students of the project who needed to read the drafts to crystallize the intended interdisciplinarity in their own work.

The general Project Calendar with fundamental dates is explained below. Phase 0 (March, 2017): Appointment by the deans of the coordinators of each Project. Phase I (April-May, 2017): Fine and complete description of the projects, their contents, their interdisciplinary aspects, their dynamics, modification and / or provisional approval of the Project, communication of the project to the coordinators of the different areas and to the communication área. Phase II (May, 2017): Review of the project by the coordinators, proposals from the coordinators and specific adaptation of the project to the different áreas, review of the interdisciplinary project and final approval. Phase III (May-June, 2017): Development in each area of the guide documents for students. Phase IV (June, 2017): Identification of possible students participating in the project, both undergraduate and graduate. Phase V (September 2017-June 2018): Selection and final formalization of students in the Project, implementation of the project in the academic year 17-18, beginning of the TFG / TFM, monitoring of the project on a bi-monthly basis. Phase VI (October 2017-June 2018): Selection and final formalization of students in the project with their tutor, implementation of the project in the academic year 17-18, beginning of the TFG / TFM, project monitoring. Phase VII (July, 2018): Delivery, defense and presentation of the TFG / TFM, public event to share conclusions and the experience of the student and tutor in the project.

Project monitoring Schedule. Activities and dates to be sent to the tutor: First shipment (November, 2017), second shipment (April, 2018), third shipment (May, 2018), final shipment (June, 2018). On the other hand, bimonthly follow-up meetings were organized throughout the Project. Calendar of student-tutors meetings: I Meeting of students and tutors: presentation of students and tutors that make up the project, doubts and initial training. Education Department (in charge of Professor Javier Pericacho) on the general theme of the project: Methodological innovation and educational quality in Primary Education (October, 2017). II Meeting students and tutors: project situation, doubts, TFG status, interdisciplinary debate on methodological innovation and educational quality (February, 2018). III Meeting students and tutors: project situation, doubts, TFG status, interdisciplinary debate, see how each student is incorporating what others are in their work (April, 2018).

Throughout the process, the Project Coordination organized several individual and group meetings with students and tutors. These meetings were intended to resolve difficulties, doubts and assess development. It analyzed how the project was developing, practical problems, theoretical doubts, etc.

Results and conclusions

The University is an essential institution in the cultural elevation, the evolution of knowledge and the progress of society. The complexity of the current reality demands from the university a holistic, plural and eclectic reflection. This project has achieved the meeting between different academic disciplines. It has favored interdisciplinarity and intellectual dialogue. Different basic knowledge that has studied the same theoretical and practical problem.

The experience and the teaching project presented allows students and teachers to reflect together, observe other practices, exchange opinions, bring different academic disciplines closer, establish forms of collaboration and improve their academic skills. This experience has been an opportunity for students to expand their skills, improve their academic competencies, and increase their motivation. On the other hand, the project has made it possible to open new spaces for collaboration and networking among teachers. In conclusion, carrying out interdisciplinary projects opens up countless possibilities in universities for knowledge. The 21st century requires spaces for greater encounter, dialogue and relationship between different academic disciplines. ©

Francisco Javier Pericacho Gómez. Universidad Autónoma de Madrid, Dpto. Pedagogía. Más de 40 publicaciones en revistas académicas nacionales e internacionales (indexadas en bases de impacto, SCOPUS SJR: Q1, Q2 y Q3) y divulgativas en referentes de educación, diferentes libros y capítulos de libro en editoriales de reconocido prestigio (Ranking Scholarly Publishers Indicators, SPI) y la participación en diferentes Proyectos de Innovación y Mejora de la Calidad Docente. Evaluador y miembro del Comité Editorial de varias revistas científicas nacionales e internacionales de educación e investigador en varios grupos de Investigación consolidados (Universidad Complutense de Madrid y Universidad Autónoma de Madrid). Consejo Asesor en la “Cátedra de Renovación Pedagógica” de la Universidad de Girona.

References

- Amigo Román, Pedro; Carvajal de la Vega, David; Casado Alonso, Hilario; Lafuente del Cano, Jorge; Ortúñez Goicolea, Pedro Pablo (2016). *Fomento de la interdisciplinariedad en los TGF de Historia Económica en Nuevas perspectivas en la investigación docente de la historia económica*. Santander: Editorial de la Universidad de Cantabria.
- Camacho Torregrosa, Francisco Javier; Pérez Zuriaga, Ana; Coll Carrillo, Hugo; Alcalá González, Julián; Romero Gil, Inmaculada; Garrido de la Torre, María Elvira (2015). *Desarrollo de un Trabajo de Fin de Grado Multidisciplinar en Ingeniería Civil como preparación del alumno para la vida profesional*. Congreso In-Red 2015 Universitat Politècnica de València
- García Magna, Deborah; Castillo Rodríguez, Cristina; Ríos Moyano, Sonia; Cristofol Rodríguez, Carmen; Carrasco Santos, María Jesús; Rodríguez Mérida, Rosa María; Pastor García, Inmaculada; González Ramírez, David (2011). La interdisciplinariedad en la educación superior: propuesta de una guía para el diseño de juegos de rol. *Teoría de la Educación. Educación y Cultura en la Sociedad de la Información*, 12 (1), 386-413.
- Martín Castejón, Pedro Juan; Lafuente lechuga, Matilde, Faura Martínez, Úrsula. (2018). Efectos de la coordinación interdepartamental en los Trabajos Fin de Grado en la Facultad de Economía y Empresa de la Universidad de Murcia. *Revista de investigación en educación*, 16(1), 5-15.
- Muñoz Fernández, Guzmán Antonio; Rodríguez Gutiérrez, Pablo; Luque Vílchez, Mercedes (2019). La formación inicial del profesorado de educación secundaria en España: perfil y motivaciones del futuro docente. *Educación XX1*, 22(1), 71-92.

- Pericacho, F. J., Vaíllo, M., Zamorano, S. y Camuñas, N. (2019). Procesos de mejora en los centros educativos: ejemplificación de tres campos de análisis e innovación docente. *Ensaio: aval. pol. públ. Educ.*, 27(104), 568-588.
- Pucciarelli, F. y Kaplan, A. (2016). Competition and strategy in higher education: Managing complexity and uncertainty. *Business Horizons*, 59(3), 311-320.
- Tamayo, J., Martínez, J., Gamero, J., Romero, J. y Delgado, L. (2019). Añadiendo valor a los trabajos de fin de Grado: Una propuesta interdisciplinar. *Revista electrónica sobre la enseñanza de la Economía Pública*, 25, 1-20.